Scientific Note

THE FIRST FIELD RECORD FOR THE ANT TETRAMORIUM BICARINATUM NYLANDER (HYMENOPTERA: FORMICIDAE) IN CALIFORNIA

On 19 Apr 1990, I discovered foraging columns of small, unfamiliar, pale red ants in a residential area of Long Beach. The ants were nesting in the soil at the edge of walks along the curb at the base of trees and in the bark of trees. The colonies occur as numerous scattered nests spread out over a large area. The workers are small, 3–4 mm long with pale red to bright orange brown head and thorax and much darker black brown gaster with two nodes on the abdominal pedicel. The queens are the same color as the workers but larger, 4.5–5 mm long. The winged males have a brown head and thorax with a dark brown gaster and are 3–4 mm long.

I was certain that the ants were a species of *Tetramorium*. Roy Snelling (Los Angeles County Natural History Museum) sent me keys to the species of this genus and I identified the ants as *Tetramorium bicarinatum* (Nylander) (= *Tetramorium guineense* (Fabr.)); later Snelling and E. O. Wilson (Harvard University) confirmed my identification. This is the first field record of this species being established in California, although it has been intercepted in quarantine situations including greenhouses and warehouses several times in California (M. S. Wasbauer, personal communication).

The ant is native to Africa and has been spread throughout the tropics via commerce. It is found in the southern United States (South Carolina and Florida to Texas). It nests in moderate to large colonies that spread by budding. There may be several dealated queens per colony. My observations indicate that T. *bicarinatum* competes successfully with another introduced species, the Argentine ant, Iridomyrmex humilis (Mayr), and is spreading at the expense of the latter. It seems to have less conflict with the southern fire ant, Solenopsis xyloni (McCook), although I observed skirmishes between the two species during the summer and fall of 1992 with T. bicarinatum often being the aggressor. I call this species the "false fire ant" because of its close resemblance to S. xylonis' color and size. *Tetramorium bicarinatum* has 12 segments on the antenna, with no distinct club, instead of the 10 antennal segments and 2-segmented club found in the true fire ants. My observations support previous reports that this ant is a predator, scavenger and seed eater, and probably of little or no economic importance (Taylor, R. W. & E. O. Wilson. 1961. Psyche, 68: 138; Brown, W. L. 1964. Entomol. News, 75: 14-15). This find is the second of a new ant in about a year (Martinez, M. J. 1992. Pan-Pac. Entomol. 68: 153–154).

Material Examined. – Tetramorium bicarinatum: CALIFORNIA. LOS ANGELES Co.: Long Beach (area bounded by Junction of Pacific Coast Highway and Maine Avenue on the west, Eucalyptus Avenue to the east and Hill Street to the north), 19 Apr 1990, M. J. Martinez.

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Scientific Note

THE TYPE LOCALITY OF BOLORIA FREIJA NABOKOVI **STALLINGS & TURNER (LEPIDOPTERA: NYMPHALIDAE)**

The type locality restriction of Boloria freija nabokovi Stallings & Turner, 1946 by Troubridge & Wood (Troubridge, J. T. & D. M. Wood. 1990. J. Lepid. Soc., 44: 180–187) is incorrect. In describing the type locality of B. f. nabokovi as "102 miles north of Summit 2," they left out a comma that occurs in both the original description and on the labels of the type specimens. They also misplaced and misspelled words describing the locality. The locality was given as "Mile 102, North of Summit 2" in the original description. The full information, given in the original description (Stallings, D. B. & J. R. Turner. 1946. Canad. Entomol., 78: 134–137), follows: "Alaska Military Highway, July 23, 1943, Mile 102, North of Summit 2, Ravine, Elevation 6000 ft., Collector: D. S. Correll." This is an exact repeat of the labels attached to the type specimens as examined by Shepard in 1980.

This locality information has confused many investigators attempting to relocate B. f. nabokovi. There is no point near mile 102 (km 164.1) on the present Alaska Highway that is near an elevation of 6000 feet (1815 m). The only points where the Alaska Highway approaches 6000 feet in British Columbia are at Summit Lake and at the Sentinel Range, where Troubridge & Wood attempted to restrict the type locality. In the last 50 years, there have also been several reroutings of the original Alaska Highway that have obscured references to early mileage markers.

In 1989, Shepard examined the archives of the Yukon Territory, Whitehorse, and the Pacific Northwest Collection at the University of Washington, Seattle. Kondla examined locally available documents and interviewed long-time residents. During the construction of the Alaska Highway, in 1942, and its first year of service, in 1943, the highway utilized a mileage system different than that used after 1943.

The highway was first marked with mile posts in several sections. Section D of the road went from Fort Nelson to Watson Lake (Cohen, S. 1979. The Trail of '42. Pictorial Histories Publ. Co., Missoula, Montana). At each construction base